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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,941	11/10/2005	Gerard Bradley	1022702-000282	8313
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EXAMINER THOMAS, JAISON P				
ART UNIT 1796		PAPER NUMBER		
NOTIFICATION DATE 03/25/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

### Office Action Summary

**Application No.**

10/536,941

**Applicant(s)**

BRADLEY ET AL.

**Examiner**

Jaision P. Thomas

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 1/26/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-23 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-23 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- \_\_\_\_\_ Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- \_\_\_\_\_ Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1/26/2009 has been entered.
2. Claims 16-23 and 27-29 are pending. Claim 29 is new. Claims 16-23, 27 and 28 are amended.
3. The rejections of Claims 16-23 under 35 USC 102(e) as anticipated by or, in the alternative, under 35 USC 103(a) as being obvious over Bastiaens et al. (US Patent 7022776) are withdrawn in view of Applicant's amendments.
4. The rejections of Claims 16-23 under 35 USC 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as obvious over Hagimori et al. (EP 0535955) are withdrawn in view of Applicant's amendments.
5. The rejections of Claims 15-23, 27 and 28 under 35 USC 102(e) as being anticipated by, or in the alternative, under 35 USC 103(a) as obvious over Miyoshi et al. (US Patent App. Pub. No. 2003/0134963) are withdrawn in view of Applicant's amendments.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 16-22 and 29 are rejected under 35 USC 102(e) as anticipated by or, in the alternative, under 35 USC 103(a) as being obvious over Bastiaens et al. (US Patent 7022776).

The teachings of Bastiaens et al. are summarized and relied upon as disclosed in the Office Action dated 2/21/2008.

9. Claims 16-22 and 29 are rejected under 35 USC 102(b) as being anticipated by, or in the alternative, under 35 USC 103(a) as obvious over Hagimori et al. (EP 0535955).

The teachings of Hagimori et al. are summarized and relied upon as disclosed in the Office Action dated 2/21/2008.

10. Claims 16-23 and 27-29 are rejected under 35 USC 102(e) as being anticipated by, or in the alternative, under 35 USC 103(a) as obvious over Miyoshi et al. (US Patent App. Pub. No. 2003/0134963).

The teachings of Miyoshi et al. are summarized and relied upon as disclosed in the Office Action dated 10/3/2008.

11. Claims 16-23 and 27-29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lundgard et al. (US Patent 5844037).

Lundgard et al. teaches a thermoplastic composition which is comprised of two phases wherein the minor phase is comprised of at least 60 percent of conductive carbon and the minor phase is comprised of low crystallinity polymer (Col. 3, lines 17-22). Examples of the polymers that can be used in the major and minor phases include

polyamide (nylon) and elastomers (Col. 3, line 57 and Col. 4, lines 17-26 respectively). Examples of the conductive carbon include carbon black, graphite and carbon fiber (Col. 12, lines 45-47). The minor phase is present from 15 to 49 percent by weight of the total composition and the major phase is present from 50.9 to 84.4 percent by weight of the total composition. The conductive fillers can be present from 0.1 to 12 percent by weight and the total amount of conductive carbon is present in up to 95% of the minor phase (Col. 18, Claims 1 and 3). The conductive carbon is pre-mixed with the polymer that it will be dispersed in prior to incorporation with the major phase (Col. 13, lines 46-54). Example 5 shows a pre-blend (i.e. masterbatch) of carbon black being made with an elastomer (Col. 16, lines 33-38).

### ***Response to Arguments***

12. Applicant's arguments filed 1/26/2009 have been fully considered but they are not persuasive.

With respect to the rejections over Bastiaens et al, Applicants contend that the reference teaches the incorporation of a conductive filler into the blend of polyamide and polyphenylene ether and the reference does not suggest composite wherein the conductive filler and impact modifier are present in the composite as a separate "dispersed phase". Applicants contend that a composite wherein the conductive filler in dispersed phase would contravene the teachings of Bastiaens and that one of ordinary skill in the art would not arrive at the claimed composition using Bastiaens since the one ordinary skill in the art would think that a composite wherein the conductive filler is not intimately mixed would yield a material with undesirable properties.

The Examiner respectfully disagrees. The Examiner notes that Applicants construe the phrase "dispersed phase" as requiring a localized distribution of impact modifier and conductive filler within a matrix of thermoplastic polyamide. The Examiner disagrees with this interpretation and construes the phrase to its broadest reasonable interpretation. The Examiner has considered the Specification and has not found a specific definition for the concept of "dispersed phase" and thus interprets the term as encompassing embodiments wherein the filler, impact modifier and polyphenylene ether are merely blended into a larger weight section of polyamide. Inasmuch as Bastiaens contemplates embodiments of the invention which having a larger amount of polyamide (Bastiaens states as much as 65 % of the composition can be polyamide (Col. 2, line 26)) and smaller amounts of polyphenylene ether (as little as 20 weight percent (Col. 2, line 21)), conductive filler (as little as 0.025 weight percent, Col. 2, line 26)) and impact modifier (as little as 1 percent (Col. 10, line 32)) then these three components can constitute a "dispersed phase" within the broad meaning of the term. The Examiner notes that Claim 29 does not exclude the presence of polyphenylene ether within the "dispersed phase" of the composition claim.

With respect to the Hagimori rejection, the Applicants contend that the Hagimori reference teaches the use of polyphenylene ether in addition to the polyamide and that the presence of the filler in mixture with the PPE and polyimide which allegedly does not meet the limitations of Claim 29 requiring one phase only having polyimide and the dispersed phase having conductive fillers.

The Examiner respectfully disagrees with similar reasoning used with respect to Bastiaens above. The Examiner interprets the claim as discussed above, and notes that the embodiments of Hagimori clearly contemplate the PPE and conductive filler being present has minor components i.e. "a dispersed phase" as the Examiner described above.

With respect to the rejections over Miyoshi, the Applicants contend that newly added Claim 29 excludes the presence of PPE from the matrix phase by the use of the phrase "consisting of".

The Examiner respectfully disagrees and notes that claims do not exclude the possibility of PPE being present as a "dispersed phase." The Examiner also notes Example 7, wherein the filler, impact modifier and PPE are blended in lower weight sections relative to the polyamide and are blended as a separate masterbatch. The Examiner construes this embodiment as meeting the instantly claimed limitations.

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 9:30 am to 6:00 pm.
14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. P. T./  
Examiner, Art Unit 1796

/Mark Kopec/  
Primary Examiner, Art Unit 1796